Executive summary

- Adjusting to lower oil incomes and monitoring the property-market boom
- Bolstering competitiveness on a wide range of fronts
- Improving skills to help productivity and inclusiveness
Adjusting to lower oil incomes and monitoring the property-market boom

Norway has very high material living standards and scores well on other aspects of well-being, thanks to a mix of natural resources wealth, good policy making and inclusive and egalitarian social values, including active efforts to break down barriers to women’s careers. However, the substantial oil-price falls since 2014 have been a reminder of Norway’s exposure to external risks and consequently the importance of a flexible and competitive mainland economy. Norway continues to experience strong property-price momentum, raising concerns for macroeconomic stability. Also, the long-standing fiscal rule risks being inappropriately expansionary.

Bolstering competitiveness on a wide range of fronts

Norway lost some competitive edge in the past 10-15 years and trend productivity growth has been slowing. Improving the framework conditions to address these issues is key. Recent reform initiatives by the current government are welcome and should continue. Taxation needs to be scaled back and better tuned to growth, and public-sector efficiency reforms need to be pursued vigorously. Furthermore, campaigns to reduce bureaucracy need to continue. Some sectors, notably agriculture, need to be less sheltered from international competition. Agriculture and rural policy needs to focus more strongly on economic sustainability.

Improving skills to help productivity and inclusiveness

Reforms that enhance skills are also important for economic success and social well-being. Further improvements to both compulsory and tertiary education in terms of quality and efficiency are essential. Tertiary-education policy needs to examine the structure of provision and the incentives that drive student decisions on what to study and the pace of study. Programmes addressing the longstanding problems of the sickness and disability system that discourage labour supply need to continue.
## MAIN FINDINGS

<table>
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<tr>
<th>Ensuring price and financial stability</th>
</tr>
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<td>Continued increases in property prices and mortgage lending poses risks.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Key Recommendations</th>
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</thead>
<tbody>
<tr>
<td>Should house-price growth remain uncomfortably high, consider tightening macroprudential measures while closely monitoring and reviewing their effectiveness.</td>
</tr>
</tbody>
</table>

## Avoiding pro-cyclicality in fiscal policy, ensuring efficient tax and public spending

<table>
<thead>
<tr>
<th>Fiscal policy has been persistently expansionary but is still well below what the fiscal rule will allow.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Norway's tax burden is among the highest in the OECD, hindering economic diversification and international cost competitiveness.</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Key Recommendations</th>
</tr>
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<tbody>
<tr>
<td>Keep the deficit well below the fiscal rule to avoid unwanted fiscal expansion by providing guidance that sets a speed-limit on increases in the structural non-oil deficit.</td>
</tr>
<tr>
<td>Consistent with the government’s policy of reducing taxation, use the ample fiscal space to lower the tax burden and shift away from income taxation towards indirect taxation.</td>
</tr>
<tr>
<td>Reduce tax distortions in housing by either scrapping mortgage-interest relief or by increasing property taxes on housing as a proxy for implicit rent.</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Creating room for lighter taxation requires renewed attention to public-spending efficiency.</th>
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<table>
<thead>
<tr>
<th>Key Recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bring more private-sector provision to public services, including in education and health care where outsourcing remains underutilised.</td>
</tr>
<tr>
<td>Continue to press for mergers among small municipalities.</td>
</tr>
</tbody>
</table>

## Boosting productivity through a more supportive business environment, and stronger competition

<table>
<thead>
<tr>
<th>Weak capacity to compete on cost amplifies the need for good business framework conditions on other fronts. Despite best-practices in many aspects of business regulation and market competition, Norway lags behind markedly in some areas.</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Key Recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cut corporate and personal income taxation further in the tax mix.</td>
</tr>
<tr>
<td>Expedite campaigns to cut red tape.</td>
</tr>
<tr>
<td>Press on with de-regulation, for instance in shop-opening hours.</td>
</tr>
<tr>
<td>Continue network-industry reform, particularly in post and rail services.</td>
</tr>
<tr>
<td>Reduce import tariffs and direct subsidies to farmers.</td>
</tr>
<tr>
<td>Remove legislative biases that favour agriculture.</td>
</tr>
<tr>
<td>Encourage diversification of economic activity in rural areas by improving general framework conditions.</td>
</tr>
</tbody>
</table>
### MAIN FINDINGS

#### Output growth and inclusiveness through deepening skills and encouraging labour supply

Substantial public resources are spent on education but outcomes are not exceptional – Norway’s PISA score is middle ranking and it has comparatively few internationally top-ranking universities – and there is room for efficiency improvements in the pace of study and the structure of provision.

### KEY RECOMMENDATIONS

Continue to improve primary and secondary teacher training and tackle low upper-secondary completion rates.

- Make school-performance data more readily available.
- Pursue the Skills Strategy to strengthen the link between skills development and economic growth.
- Continue to promote mergers among higher education institutions.
- Pursue plans to include the graduation rates in the formula for performance-based funding.
- Further target incentives and financial support to students who complete their courses on time.
- Steer student choices, for instance, via loan discounts for subjects with high demand.

#### Employment rates are impressively high but there are nevertheless weak points.

Press on with reform to sick leave and disability benefit.

- Rectify early retirement biases in public-sector pensions.
- Liberalise temporary working.

### Environmental sustainability

Greenhouse-gas emissions are already low owing to through emission-free hydroelectricity generation.

Use the most cost-efficient mechanism to further reduce emissions, in particular work further on reducing disparities in greenhouse-gas taxation.
Assessment and recommendations

- Recent macroeconomic developments and near-term prospects underscore the main challenges
- Ensuring price and financial stability
- Getting the fiscal rule right, ensuring efficient tax and public spending
- Boosting productivity through a more supportive business environment and stronger competition
- Boosting output and inclusiveness by improving skills and encouraging labour supply
- Tackling environmental issues

The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.
Norway’s economy has been transformed since the discovery of commercially viable offshore oil and gas fields in the late 1960s which helped the country to achieve a high level of GDP per capita (Figure 1). Good macroeconomic management of the oil wealth via the sovereign wealth fund and the associated fiscal rule has helped achieve impressive standards of living across society. Also, inflows of labour from other European Economic Area (EEA) countries have supported activity and reduced the risk of overheating.

The country scores well in practically every dimension of the OECD’s Better Life Index (Figure 2). Household disposable income ranks third highest in the OECD area and this is echoed in good outcomes in jobs, earnings, and housing. Furthermore, scores relating to subjective well-being, work-life balance and the environment are good. Low levels of inequality and poverty are being driven by strong societal values of inclusiveness and egalitarianism and by other features of the “Nordic model”. In particular, emphasis on the quality of education, encouraging and facilitating the employment of women, well-functioning centralised wage bargaining systems, good legal frameworks for business and high levels of trust in society.

Sustaining these outstanding economic and social outcomes is the key priority for Norway’s economic policy makers. The oil-price drop in mid-2014 (Figure 3, Panel A) has served as a timely reminder that a flexible, competitive and productive mainland economy and a floating exchange rate are central to cushioning external shocks and to developing balanced growth once the income from petroleum begins to fade. In this regard, it is of concern that Norway’s mainland economy has experienced a secular decline in...
productivity growth and loss of international competitiveness due to unit-labour-cost increases over the past 10-15 years (Figure 3, Panels B and C). Against this backdrop, the main messages of this Survey are:

- Continue to ensure that strong macroeconomic policies cushion the Norwegian economy from external shocks, and equitably and sustainably manage its petroleum wealth. This includes a focus on the cost effectiveness of public spending to ensure the now large oil wealth (Figure 3, Panel D) and tax revenue are well used.

- Use structural policies to foster stronger productivity growth and international competitiveness, and to smooth adjustment towards less medium-term dependence on petroleum.
Chapter 1 explores how to enhance the quality of higher education, a key factor for increasing competitiveness and laying the foundations for sustained and inclusive growth. Chapter 2 examines how costly and distorting farm support can be replaced by measures to diversify rural economies.
Recent macroeconomic developments and near-term prospects underscore the main challenges

Mainland output growth continued to slow in 2015, as the large fall in oil prices in 2014 depressed oil-related activity (Figure 4, Panel A). Petroleum-sector investment, which had risen substantially over the past decade, started declining even before the fall in oil prices due to cost-reduction campaigns by the oil industry and the completion of several large projects (SSB, 2015a) (Figure 4, Panel B). Continued low oil prices since mid-2014 have prompted further cost-cutting and reduced capacity (and incentives) to fund new exploration and development projects throughout the oil industry and this has impacted the mainland economy's sizeable sector of oil-related companies, many of which operate globally as well as in the North Sea.

The slowing economy has led to an increase in the rate of unemployment, which went above 4% of the labour force in early 2015 (Figure 4, Panel D). Occupations and regions linked closely to the petroleum sector have been mostly affected (Norges Bank, 2015a). However, consumption is being supported by low interest rates, housing wealth and an expansionary fiscal policy. In addition, low oil prices have brought exchange rate depreciation (Figure 3, Panel A) and slowed wage growth, which is helping competitiveness. Indeed, exports of non-oil goods trended slightly upwards (Figure 4, Panel C). Recent surveys of manufacturing export firms also point to better export prospects (Norges Bank, 2015a). Also, tourism has picked up significantly.

Currency depreciation lifted core consumer-price inflation but the economic downturn is containing inflationary pressures (Figure 4, Panel E). However, house prices continued to rise, though at a more moderate pace, and household debt levels increased to over 200% of disposable income, supported by low interest rates (Figure 4, Panel F).

Economic activity is projected to recover gradually; the latest OECD projection envisages mainland output growth of 1.6% in 2016 and 2.2% in 2017 (Table 1). Accommodative macroeconomic policies, through continued low interest rates and fiscal support, and strong non-oil exports will underpin growth. The government's budget proposal for 2016 envisages a structural non-oil deficit of 7.1% of trend mainland GDP, which represents 0.7 percentage-point increase on the previous year (Ministry of Finance, 2015a). Non-oil business investment is expected to increase as global demand increases, domestic prospects improve and as firms become more competitive. In the petroleum sector, an expected fall in production will dent total export growth in 2016, although new investment projects will partly offset the decline in ongoing projects.

The profile of risks for Norway is complex. Within the macroeconomic scenario described by the central projection, the range of possible outcomes is fairly wide. Many of the risks are external. Oil-sector developments will remain a substantial influence on the range of outcomes around the central projection. Developments in Europe have strong influence on demand for non-oil exports and uncertainties in the pace and timing of recovery will influence developments in Norway. For instance, the strengthening recovery in Europe, if continued, could boost Norway's exports further. In addition, Norway is not immune from the risks emerging in China and geopolitical risks. Also, global financial-market movements have implications for the value of Norway's sovereign wealth fund. Large changes in the fund's value can, in turn, have short-run influence on the economy by affecting fiscal policy because Norway's fiscal rule links to the value of the fund (see below). Among the domestic risks, softening house prices would most likely influence the economy via reduced household consumption growth (this is discussed further below). Overall, there are significant downside risks.
Figure 4. Recent macroeconomic developments

A. Mainland GDP growth (volume)

B. Investments¹ (volume)

C. Export volume

D. Labour market

E. Inflation

F. Household debt and house prices

1. 2015 annual data are OECD projections.
2. The share of firms reporting that labour supply is a constraint on output growth.
3. CPI adjusted for tax changes and excluding energy products.
4. Ratio of household debt to disposable income. Loan debt for households and non-profit organisations as a percentage of disposable income, adjusted for estimated reinvested dividend income for 2000-05 and redemption/reduction of equity capital for Q1 2006-Q3 2012.


StatLink: http://dx.doi.org/10.1787/888933314711
## Table 1. Macroeconomic indicators
### Annual percentage change, volume (2013 prices)

<table>
<thead>
<tr>
<th>2012 (billion NOK)</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDP</td>
<td>2,965</td>
<td>1.0</td>
<td>2.2</td>
<td>1.1</td>
<td>1.1</td>
</tr>
<tr>
<td>Mainland GDP</td>
<td>2,295</td>
<td>2.3</td>
<td>2.3</td>
<td>1.3</td>
<td>1.6</td>
</tr>
<tr>
<td>Private consumption</td>
<td>1,176</td>
<td>2.7</td>
<td>1.7</td>
<td>2.4</td>
<td>1.7</td>
</tr>
<tr>
<td>Government consumption</td>
<td>619</td>
<td>1.0</td>
<td>2.9</td>
<td>2.4</td>
<td>2.7</td>
</tr>
<tr>
<td>Gross fixed capital formation</td>
<td>660</td>
<td>6.3</td>
<td>0.0</td>
<td>-3.5</td>
<td>0.2</td>
</tr>
<tr>
<td>Housing</td>
<td>140</td>
<td>5.3</td>
<td>-1.5</td>
<td>0.2</td>
<td>0.2</td>
</tr>
<tr>
<td>Business1</td>
<td>405</td>
<td>5.1</td>
<td>-1.7</td>
<td>-6.8</td>
<td>-1.4</td>
</tr>
<tr>
<td>Non-oil sector</td>
<td>223</td>
<td>3.3</td>
<td>0.4</td>
<td>1.6</td>
<td>3.4</td>
</tr>
<tr>
<td>Oil sector</td>
<td>185</td>
<td>15.4</td>
<td>-4.2</td>
<td>-11.1</td>
<td>-8.6</td>
</tr>
<tr>
<td>Government</td>
<td>115</td>
<td>11.7</td>
<td>7.3</td>
<td>3.5</td>
<td>4.0</td>
</tr>
<tr>
<td>Final domestic demand</td>
<td>2,455</td>
<td>3.2</td>
<td>1.8</td>
<td>0.8</td>
<td>1.6</td>
</tr>
<tr>
<td>Stockbuilding2</td>
<td>127</td>
<td>0.4</td>
<td>0.5</td>
<td>0.8</td>
<td>-0.6</td>
</tr>
<tr>
<td>Total domestic demand</td>
<td>2,582</td>
<td>3.5</td>
<td>2.0</td>
<td>1.6</td>
<td>0.8</td>
</tr>
<tr>
<td>Exports of goods and services</td>
<td>1,204</td>
<td>-1.7</td>
<td>2.2</td>
<td>2.1</td>
<td>1.8</td>
</tr>
<tr>
<td>of which: Crude oil and natural gas</td>
<td>568</td>
<td>-7.6</td>
<td>1.5</td>
<td>..</td>
<td>..</td>
</tr>
<tr>
<td>Imports of goods and services</td>
<td>821</td>
<td>4.9</td>
<td>1.5</td>
<td>3.3</td>
<td>1.4</td>
</tr>
<tr>
<td>Net exports2</td>
<td>383</td>
<td>-2.0</td>
<td>0.4</td>
<td>-0.2</td>
<td>0.3</td>
</tr>
<tr>
<td>Other indicators (growth rates, unless specified)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Potential GDP</td>
<td>..</td>
<td>2.2</td>
<td>2.3</td>
<td>2.3</td>
<td>2.3</td>
</tr>
<tr>
<td>Output gap³</td>
<td>..</td>
<td>-0.2</td>
<td>-0.3</td>
<td>-1.3</td>
<td>-2.0</td>
</tr>
<tr>
<td>Employment</td>
<td>..</td>
<td>0.6</td>
<td>1.0</td>
<td>0.6</td>
<td>0.4</td>
</tr>
<tr>
<td>Unemployment rate</td>
<td>..</td>
<td>3.4</td>
<td>3.5</td>
<td>4.3</td>
<td>4.5</td>
</tr>
<tr>
<td>GDP deflator</td>
<td>..</td>
<td>2.5</td>
<td>0.5</td>
<td>-0.9</td>
<td>2.7</td>
</tr>
<tr>
<td>Consumer price index</td>
<td>..</td>
<td>2.1</td>
<td>2.0</td>
<td>2.1</td>
<td>2.4</td>
</tr>
<tr>
<td>Core consumer prices</td>
<td>..</td>
<td>1.5</td>
<td>3.1</td>
<td>2.4</td>
<td>2.6</td>
</tr>
<tr>
<td>Household saving ratio, net⁴</td>
<td>..</td>
<td>7.6</td>
<td>8.5</td>
<td>8.4</td>
<td>8.3</td>
</tr>
<tr>
<td>Trade balance⁵</td>
<td>..</td>
<td>13.5</td>
<td>11.7</td>
<td>..</td>
<td>..</td>
</tr>
<tr>
<td>Current account balance⁵</td>
<td>..</td>
<td>10.2</td>
<td>9.7</td>
<td>7.1</td>
<td>7.1</td>
</tr>
<tr>
<td>General government financial balance⁶</td>
<td>..</td>
<td>10.8</td>
<td>9.1</td>
<td>6.9</td>
<td>5.5</td>
</tr>
<tr>
<td>Government Pension Fund Global⁶</td>
<td>..</td>
<td>210.0</td>
<td>256.1</td>
<td>267.4</td>
<td>271.1</td>
</tr>
<tr>
<td>Underlying government primary balance³</td>
<td>..</td>
<td>-2.8</td>
<td>-2.8</td>
<td>-3.5</td>
<td>-4.2</td>
</tr>
<tr>
<td>General government gross debt⁵</td>
<td>..</td>
<td>34.9</td>
<td>32.7</td>
<td>34.1</td>
<td>36.2</td>
</tr>
<tr>
<td>General government net debt⁶</td>
<td>..</td>
<td>-203.8</td>
<td>-242.0</td>
<td>-249.9</td>
<td>-255.2</td>
</tr>
<tr>
<td>Non-oil balance⁶</td>
<td>..</td>
<td>-4.9</td>
<td>-6.4</td>
<td>-6.8</td>
<td>-7.6</td>
</tr>
<tr>
<td>Structural non-oil balance⁶</td>
<td>..</td>
<td>-5.2</td>
<td>-5.8</td>
<td>-6.4</td>
<td>-7.1</td>
</tr>
<tr>
<td>Structural non-oil balance (% GPFG)⁶</td>
<td>..</td>
<td>-2.5</td>
<td>-2.3</td>
<td>-2.4</td>
<td>-2.6</td>
</tr>
<tr>
<td>Three-month money market rate, average</td>
<td>..</td>
<td>1.8</td>
<td>1.7</td>
<td>1.3</td>
<td>0.9</td>
</tr>
<tr>
<td>Ten-year government bond yield, average</td>
<td>..</td>
<td>2.6</td>
<td>2.5</td>
<td>1.5</td>
<td>1.4</td>
</tr>
</tbody>
</table>

**Memorandum items:**

| Non-mainland GDP (petroleum and shipping) | 670 | -3.4 | 2.1 | 1.2 | -0.3 | 0.0 |

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1. Also includes shipping sector.
2. Contributions to changes in real GDP, actual amount in the first column.
3. As a percentage of potential GDP.
4. As a percentage of household disposable income.
5. As a percentage of GDP.
6. As a percentage of trend mainland GDP.

The wide range of possible future oil-market developments not only add a range of uncertainty to the central projection but also suggest different macroeconomic scenarios are possible (“vulnerabilities” rather than “risks”). Further drop in the oil price could see substantial cutback in production and demand for oil-related services with an increasing number of North-sea fields falling below operational profitability and greater reluctance to invest in exploration (Table 2). This could trigger more substantial house-price collapse with dramatic consequences for household consumption and financial stability. Conversely, the vagaries of the oil market do not preclude the chance of a large rebound in prices, bringing Norway back to the rewards, and challenges, of strong oil-sector demand and substantial inflows to its wealth fund. In Europe, the possibility of considerable turbulence remains, which could also push the Norwegian economy into a different conjuncture than that described in the central projection.

Table 2. Possible extreme shocks to the Norwegian economy

<table>
<thead>
<tr>
<th>Shock</th>
<th>Possible impact</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Oil prices</strong></td>
<td>Low-price scenario. Substantial scaling back of oil and gas related activities, including investment in domestic production and export of oil-related services. Substantial mainland job losses and weakening of income and output.</td>
</tr>
<tr>
<td><strong>High-price scenario</strong></td>
<td>Increased wealth and incomes but a deepening of the challenges in managing oil wealth.</td>
</tr>
<tr>
<td><strong>External demand weakness</strong></td>
<td>Downside risks dominate. Weakening mainland output growth, cost-competitiveness remains challenging due to a weak Euro. Upside surprises could help Norway rebalance by creating demand for non-oil exports.</td>
</tr>
<tr>
<td><strong>House-price correction</strong></td>
<td>Downward house price correction could see diminished household consumption (due to wealth effects), mortgage defaults and concerns about bank stability with echoes in markets. Further large upward price shocks would increases market tensions and concerns about a market bubble.</td>
</tr>
<tr>
<td><strong>Substantial global asset-price adjustment</strong></td>
<td>Downward correction in wealth fund’s value, weakening external demand as adjustment filters through to real economy. Further strong growth in wealth fund’s value, positive effects on national wealth and incomes in the longer term.</td>
</tr>
</tbody>
</table>

Norway is in a very strong position to handle risks and vulnerabilities, such as those described above. Flexible monetary policy with a floating exchange rate in combination with the wealth fund and fiscal framework reduces exposure to oil-price-related and other risks. And, there is capacity for substantial automatic and discretionary counter-cyclical fiscal stimulus, even while remaining within the bounds set by fiscal rules (see discussion below).

**Ensuring price and financial stability**

**Low interest rates are supporting activity but fuelling the housing market**

Norway’s flexible inflation-targeting regime has a good track record in delivering low and stable inflation (Figure 5, Panel A). In parallel with many economies, the policy rate has been notched down in recent months; as of September 2015 the policy rate has been 0.75%. Within the current macroeconomic context, both globally and domestically, this further monetary easing has been warranted, reflecting renewed fears about the strength of the global economy generally, and in particular for Norway, in view of the oil-price declines. There remains further room to manoeuvre. Inflation is temporarily boosted by currency depreciation but otherwise is contained by remaining economic slack and inflation expectations appear well anchored (Figure 4, Panel E and Figure 5, Panel A). Monetary policy should therefore remain supportive for some time, but eventually tighten when growth picks up further.
However, Norway is not immune from the issues and risks that have arisen from prolonged monetary stimulus, including asset-price inflation and greater risk taking as investors seek to offset the very low returns from interest-bearing assets. In particular, low borrowing costs and generous tax-treatment of mortgage interest payments have resulted in mortgage lending growing at a fast pace, and house prices have almost doubled since 2000 (Figure 5, Panels B and C). As a result, household indebtedness is now at over 200% of disposable income (Figure 5, Panel D) a very high ratio, and even higher for young people (Norges Bank, 2015b). In the event of increased borrowing costs (most mortgages are floating rate), the risk of widespread financial instability through household credit defaults is comparatively small, thanks to prudential regulation. However, significant macroeconomic effects may nevertheless emerge through weakening consumption as households economise to accommodate increased mortgage repayments. Life insurance companies and pension funds are facing challenges owed to low interest
rates and increased longevity. Indeed, in Norway about 80% of life insurers’ liabilities include contracts with annual guaranteed returns (Finanstilsynet, 2015), so the low-interest-rate environment makes it more difficult for them to fulfil their long-term obligations.

**Capital-requirements and mortgage regulation are being tightened**

The 2008 global financial crisis demonstrated that Norwegian banks are vulnerable because of a high share of foreign wholesale funding. The banks weathered the global financial crisis mainly due to substantial liquidity support from the government. The regulators have since been toughening financial-sector regulations in the face of the booming housing market. In banking, measures taken include an early phasing in of Basel III capital requirements, including a counter-cyclical capital-buffer (which is to be increased in size as of mid-2016, Ministry of Finance, 2015b) and implementation of the latest international prudential standards has continued (see annex). Indeed, bank capital requirements have increased substantially in the past two years (Figure 6). Capital requirements are also set to be tightened for insurance companies with the introduction of the Solvency II framework in 2016 (Finanstilsynet, 2015).

**Figure 6. Capital requirements on Norwegian banks**

Common Equity Tier 1 requirements in the new regulatory framework

![Figure 6](image)

1. Ratio of Common Equity Tier 1 capital to risk-weighted assets.

Macroprudential measures to reduce systemic risks from mortgage lending (and the housing market in general) have also been taken. Regulators have imposed measures to increase risk-weights for mortgage loans in banks that use internal risk models (“IRB banks”, typically large banks). Reflecting regional co-operation in banking the Swedish and Danish financial supervisory authorities have announced that host country regulation on this issue will apply to their bank branches in Norway. This is particularly useful given the degree of interconnectedness in the Nordic banking market. Stricter lending guidelines on residential mortgages in Norway were introduced in 2011, recommending a cap on the loan-to-value ratio at 85% (and 70% for home credit equity lines) and require an assessment whether
borrowers can service debt in the event of a 5 percentage-point interest-rate hike. The cap was made compulsory from 1 July 2015, yet allowing for a maximum of 10% of approved mortgage loans per quarter to be loans that do not fulfil these rules (a so-called speed limit) (Ministry of Finance, 2015c; Norges Bank, 2015a). These new regulations will be continuously assessed in light of developments in the housing market, household borrowing, and the impact on competition between lenders. They are part of a wider housing-market strategy that also addresses supply constraints, for instance through simplification of housing-construction regulation. These measures are welcome, though the authorities should also consider lowering the speed-limit provision. In addition, as mentioned in past Surveys, reduction in Norway’s strong tax-advantages in home ownership would also help cool the housing market.

**Getting the fiscal rule right, ensuring efficient tax and public spending**

**Avoiding pro-cyclicality with the fiscal rule**

Norway’s fiscal-policy framework channels all revenue (from taxation or ownership) from the oil and gas sector into a sovereign wealth fund (the Government Pension Fund Global, GPFG) which is invested entirely in foreign assets abroad. A fiscal rule limits the structural deficit to an amount equal to 4% of the value of the GPFG, with allowance for deviations. Conceptually, the rule implies an intergenerationally “fair” use of Norway’s oil wealth, since each generation spends only the real returns on the GPFG (by assumption, 4% – so far the rate of return has been close to this) thereby preserving the real value of the fund for future generations when there is no more oil.

Growth in the value of the fund has been rapid in recent years, and at times, the fund’s growth has implied that a full drawdown of 4% would mean excessively expansionary (pro-cyclical) mainland fiscal policy. Accordingly, in recent years in particular, the authorities have run non-oil structural deficits that are well below that implied by a 4% drawdown (Figure 7, Panel A). For instance, the structural non-oil deficit of 7.1% of mainland trend GDP envisaged by the 2016 budget represents only 2.8% of the capital in the GPFG.

With the “allowable” deficit according to the 4% rule (or “4 percent path”) substantially above the actual deficits, the question arises whether some adjustment to the rule is required. A key consideration is illustrated by the Ministry of Finance’s latest projections, which show that under assumptions of only a 2% real return on the fund and a low oil price that the 4 percent path will start declining from 2015 onwards (Figure 7, Panel B). Moving rapidly back to the 4% path could therefore mean some years of fiscal expansion followed by contraction (Figure 7, Panel B). To avoid this it would appear sensible to smooth the deficit path for the next several years. To help enforce this, a government commission has suggested a more gradual phasing in of oil revenues than that of recent years. Specifically, it recommends that when deviations from the 4% path are large, as in the present situation, the government should chart an explicit course to gradually return to the path (Ministry of Finance, 2015d). It has suggested guidelines that set a speed limit on structural deficit expansion, which would have this effect without opening up the rule itself. This is a welcome initiative, especially in light of pressures from population ageing.
Norway’s tax burden remains among the highest in the OECD, at around 45% of GDP (excluding petroleum-related revenues) with a heavy emphasis on income taxation (Figure 8, Panels A and B). This limits the economy’s capacity for diversification and its international cost competitiveness. As in the other Nordic counties, the substantial tax burden reflects a societal choice of comprehensive public services, such as in childcare, health, education and welfare. However, in Norway there is substantial scope for improved cost-efficiency in public spending and a degree of fiscal space, so scaling back the tax burden would not necessarily mean sacrifices in either the breadth or quality of public services. The government is putting a strong emphasis on reducing the tax burden, in particular for corporations.

Norway’s overall tax structure should be better tuned to encouraging business enterprise and productivity growth by a shift away from income taxation and towards indirect taxation. As argued in many OECD Economic Surveys, indirect taxes are preferable to
Figure 8. Norway’s tax burden is relatively high

A. Tax revenue as percentage of GDP

B. Net personal average tax rate for two-earner married couple with 2 children

C. Statutory corporate income tax rate

1. Norway: non-oil tax revenue as percentage of mainland GDP. 2014 data except for Australia, Japan, Poland and the Netherlands which take 2013 data.
2. Rates based on OECD Taxing Wages models for the case of two-earner married couple, one at 100% of average earnings and the other at 67% with 2 children. 2014 data.
3. Combination of central and sub-central government taxes. 2015 data.


http://dx.doi.org/10.1787/88893314757
direct taxes in that they favour saving and investment and have a smaller impact on business costs and profits and on work incentives compared with corporate-income tax and personal-income tax (Arnold, 2008; Johansson et al., 2008). Any such shift in the tax mix may require attention to effects on the distribution of disposable incomes arising from greater use of indirect tax.

Some steps along these lines have already been taken. In particular, the rate of corporate taxation has already been reduced from 28% to 27% (the flat-rate component of personal income tax, the “ordinary tax” on household income has been reduced in parallel). A further cut, to 25%, is slated for 2016 (again with a parallel cut in the ordinary rate of personal income taxation), which will bring the rate down to the OECD average (Figure 8, Panel C). The government’s white paper on tax reform, presented together with the 2016 budget sets a goal of reaching a rate of 22% by 2018. Reductions in the corporate tax rate should be considered in combination with corporate tax base broadening. Two important measures to broaden the tax base are: i) new limitations to counter base erosion and profit shifting; and ii) to make the depreciation rates for tax purposes more in line with the actual economic depreciation. Momentum for these moves was helped by a tax commission that suggested bringing the corporate-income and ordinary-income tax rate down to 20%.

Furthermore, inheritance tax has been cancelled and the tax on household net wealth has been reduced from 1.1% to 0.85% (as of 2015). These reductions avoid the potential for very high effective rates of taxation on some forms of saving. Calculations made by the Ministry of Finance for the 2012 Survey, found that the 1.1% rate effectively doubled the effective tax rate on real income from interest-bearing assets and shares, from 56% to 113%. Calculations based on the new rate show the effective rate on these assets is now 98% which is still very high, and therefore proposals for further reduction outlined in the government’s budget for 2016 are welcome.

While Norway’s tax system is uniform in some respects (notably, the rate of corporate tax on business and that on “ordinary income” on households is the same), it falls short of best practice on others. With regards to value-added tax (VAT), the government’s budget for 2016 includes a welcome proposal to increase the 8% VAT rate to 10%. Such moves reduce distortions and allow reductions in other tax rates and further steps towards a single rate of VAT on all goods and services would be welcome. In housing, notably the system allows tax deduction of mortgage interest but does not tax imputed rent as income. This needs to be rectified either by introducing imputed rent or a proxy for it, for instance by raising property tax on real estate. Or, if neither of these solutions are possible, consideration should be given to dropping the interest allowance.

Uniform tax treatment in a broader sense requires removing loopholes and mechanisms that enable some business and households, often through aggressive tax avoidance, to enjoy far lower taxation than others. On this issue, as elsewhere, the Norwegian authorities are paying particular attention to base erosion and profit shifting (BEPS) by companies. Indeed, this was among the key issues examined by the Tax Commission. Cross-border tax arrangements exploiting Norway’s relatively generous debt-interest rules are of particular concern. In 2014, Norway introduced new rules intended to tackle BEPS involving interest and the Commission has suggested, inter alia, further changes that would make these rules stricter. For example, the Commission proposed that interest limitation rules be extended to include all of a company’s net
interest expense (existing rules apply only to related party interest). It also proposed that the de minimis threshold, below which the rules do not apply, be reduced from net interest expense of NOK 5 million to NOK 1 million. Both of these changes should strengthen Norway’s rules for dealing with BEPS involving interest. Implementation along the lines of the Commission’s proposals is already underway, interest-deduction limitation will be tightened in 2016 and further changes are proposed in the government’s white paper on tax reform. In addition the government has begun implementing several adjustments to prevent profit shifting in multinational companies based on recommendations from the Tax Commission and BEPS-reports from the OECD.

Norway has been among the first countries to re-shape existing taxes and bring in new ones to address environmental issues. For instance, the government’s budget for 2016 proposes a road usage tax on natural gas and liquid petroleum gas (LPG). Nevertheless, there are issues, for instance the implicit rates of tax on carbon still vary widely across tax bases (environmental policy is taken up below).

**More efficient public spending**

Public-spending efficiency gains could reduce tax burdens, and make a sizeable difference to overall productivity given that government services and investment account for about one third of total mainland output. Efficiency gains are also required to address pressures from population ageing. Past Surveys have drawn particular attention to problems in compulsory education (for instance, OECD, 2008), health care (OECD, 2010) and sickness and disability benefit (OECD, 2010), and this Survey identifies issues in higher education (Chapter 1) and in agricultural support (Chapter 2). The 2016 budget aims to shift the composition of public spending towards infrastructure and education, with savings aimed in public administration. The finally agreed budget for 2016 made adjustments to accommodate costs related to the unexpected acceleration of incoming asylum seekers. The adjustment of the budget is equivalent to about 0.3% of GDP and comprises revenue and expenditure measures that do not affect the overall planned deficit. Accommodating the fiscal costs of further inflows should also endeavour to avoid excessive fiscal expansion (as discussed above).

Given the wide range of public services assigned to counties and municipalities in Norway, it is important that sub-national governments are assisted and encouraged to improve efficiency and quality. Chapter 2 of this Survey draws attention to challenges in service provision for Norway’s numerous small municipalities. Nearly 130 of the 428 municipalities have populations of less than 2 500. Jurisdictions on this scale can find it difficult to deliver services, largely due to lack of economies-of-scale. A key difficulty is that small municipalities cannot easily attract and retain specialist staff. Also, small municipalities often engage in co-operation arrangements with other municipalities for the provision of services. These usually reflect well-intentioned efforts to exploit economies of scale but for many municipalities the number and complexity of the arrangements has become difficult to manage. Moving up to a larger scale of operation would help, and therefore efforts to encourage mergers between municipalities, such as the one currently underway which includes financial incentives to merge, can only be encouraged.

Past Surveys have underscored that Norway has room for greater private provision in the supply of public services (for instance through outsourcing) including in areas such as health and education (OECD, 2012 and 2014a), and through larger private contributions to the financing of such services. The government has already made the tax treatment of VAT
for central-government services neutral as between public and private providers (the same is due to come into force for hospital services in 2017), which will help achieve the first of these objectives. As in other countries, systems for increasing private provision need to be carefully designed, for instance to control the quality of services provided. In addition, advance in the management of road-building programmes has been made with formation of a public company to plan, construct and operate specific parts of the national road network. In the past, the road-building project selection process has been criticised for picking the projects that do not rank well in terms of cost-benefit analysis. The new system however does not endeavour to rectify this part of the challenge as the company is confined to plan and construct a set portfolio more efficiently. Also, the government has detailed a new framework for public-private partnerships (PPPs) in infrastructure development that has a welcome focus on assessing the overall benefits of PPP, rather than viewing PPPs, for instance, as a vehicle for reducing near-term fiscal outlays. These efforts to strengthen infrastructure-project processes are particularly welcome in Norway as oil-wealth can bring intense pressures to embark on ambitious public investment projects.

Among the specific public-service issues, co-ordination challenges in health care are particularly prominent. In the context of efficient and good quality services in rural areas (Chapter 2) this Survey draws attention to the issues arising from the division between the provision of primary care by municipalities and secondary care services by regional health authorities operating under central government. Changes made in 2012 (the Co-ordination Reform) have helped, but additional measures, such as new information infrastructure and capacity building in municipalities, are required.

OECD analysis (for instance, the Value for Money review, OECD, 2013a) has suggested adoption of a medium-term expenditure framework, rather than relying only on projections of future spending, to guide medium-term planning. Several OECD countries have already taken this approach. Time horizons vary (for instance, three years in Sweden, four in the Netherlands and five in the United Kingdom). So does the degree to which spending allocations are binding. For example, in France, Sweden and the Netherlands budget allocations are strongly locked in (OECD, 2012). The extent to which medium-term expenditure budgeting is applied across spending areas also varies, though it is common to exclude “entitlement spending”, such as on pensions and social benefits. The government should carefully assess the pros and cons of adopting a medium-term expenditure framework in light of the report of a recent commission on this issue.

In-depth examination in the 2012 Survey suggested the use of efficiency dividends (i.e. reductions spending allocations in relation to baseline with a view to encouraging departments to find efficiency improvements in service delivery) and independent “spending reviews”. In 2015, the government introduced such dividends on all operational spending at the state level and these are being maintained in the 2016 budget. A plan to introduce an independent public-spending efficiency unit has been around for some time (one proposal was discussed in the previous Survey), but such a unit has yet to be established. However, the government has established an information and communications technology (ICT) Council for assessing new plans for small- and medium-sized ICT projects in the central government. Assessing the efficiency of government services implies that in some way inputs can be gauged against outputs. As elsewhere, measurement of the latter for many public-sector activities remains particularly challenging and efforts to improve the scope and accuracy of output indicators can only be welcomed.
Boosting productivity through a more supportive business environment and stronger competition

Going forward, the structure of Norwegian economic activity (Figure 9) will most likely shift away from petroleum-related activities. Domestic oil production is already declining and opportunities for exploration activity (both domestically and globally) will trend downwards as the number of likely locations for new economically viable reserves diminishes. There are already long-established non-oil sectors, such as shipping and energy-intensive activities that tap into Norway’s substantial sources of hydropower (for instance, aluminium smelting and fertiliser production). However, these only account for a small share of non-oil activity. As in many other countries, Norway’s economic activity has become dominated by a wide range of service sectors (Figure 9). Furthermore, export destinations have become increasingly global. Given the diversity of activities, and risks predicting which sectors will flourish in the future, ensuring supportive conditions and competitive environments for all forms of business activity needs to be a core theme of policy.

Figure 9. Norway’s economic structure¹

A. Value added by sector as % of GDP

B. Exports by type of commodity and service²

C. Mainland exports of goods by destination

D. Exports of services² by destination

1. 2014 data.
2. Includes only non-financial enterprises.
Source: Statistics Norway.

StatLink © OECD 2016
Framework conditions: Further advances in tax, red tape and innovation support are being made

Given the cost-competitiveness challenge faced by Norway's mainland business sector, policy needs to strive towards supportive framework conditions on other fronts to enhance overall competitiveness and improve productivity. As discussed above, Norway's statutory corporate tax rate does not compare well in international comparison; further cuts along the lines suggested by the Tax Commission would be welcome. However, attention is required in other policy areas too, in particular red tape and innovation and entrepreneurship.

The OECD's product-market regulation measures suggest that Norway compares reasonably with other countries, and has been cutting back barriers to business, but more slowly than elsewhere (see Figure 10, in particular Panel C, “Barriers to Entrepreneurship”). This underscores the need to expedite changes towards lighter and more efficient processes and regulations in the interfaces between business and government. The government is giving priority to this. New features in the institutional framework of

Figure 10. Norway is losing ground on the OECD's product-market-regulation (PMR) indicators

A. Product market regulation - overall

B. State control

C. Barriers to entrepreneurship

D. Barriers to trade and investment

1. Scores potentially range from zero to 6 and increase with restrictiveness.
2. OECD mean is depicted on a line connecting the minimum and maximum values within OECD.
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red-tape reduction include the establishment of a “better regulations council” along the lines of that introduced in Sweden (Government of Norway, 2013). Red tape reductions implemented so far (or in the pipeline) include lighter reporting requirements for employers to the social-security authorities, simplification in building and planning legislation and simplified tax rules for business partnerships.

Encouraging innovation and entrepreneurship can help deepen the diversity and flexibility of Norway's mainland economy and so enhance capacities to absorb oil-related shocks and strengthen the growth potential and productivity potential of the economy. New enterprise creations have been picking up in Norway (Figure 11), which is encouraging. Past OECD reviews have praised use of competitive tenders for distributing research and development (R&D) support and the 2015 Budget increased support via the core programme, Skattefunn. At the same time, however, the number of individuals qualified in STEM (science, technology, engineering and mathematics) subjects remains a concern, and there is room to strengthen university-business links. The government has launched an evaluation of this issue, including whether technology transfer offices (established to identify and encourage academic research with commercial potential) require more powers. In addition, in-depth assessment of entrepreneurship in the 2014 Survey suggested business-type skills also needed attention, such as risk assessment, people management, project planning and finance. However, challenges to tax control and monitoring need to be addressed.

Figure 11. New enterprise creation, trend cycle

Agricultural reform is needed to make rural economies sustainable

Current policies and mechanisms focus heavily on preserving the current structure of rural economies, especially in the case of agriculture. Policy goals and mechanisms need to be clearer, less focussed on preservation of the status quo through subsidy and more channelled towards encouraging change that helps rural communities thrive in the long run. Encouraging sustainable economic activities (farming or otherwise) is key.
Substantial protection of the agriculture sector remains through high import tariffs on raw ingredients and processed food and generous cash subsidies for farmers (Figure 12 and Chapter 2). The numerous import tariffs include one close on 450% on some milk imports, and there are around 100 cash support mechanisms for farmers, many providing payments directly linked to output or inputs. Also, legislation gives farmer-controlled processing and distribution co-operatives (for instance a single co-operative dominates dairy-product distribution) special powers in market regulation. The agricultural sector is exempt from standard competition legislation.

Figure 12. **Norwegian agricultural support is among the heaviest**

A. Producer support estimate, including cash subsidy and tariff support

B. Average tariffs on agricultural products

1. 2014 data.
2. Average Most-Favoured Nation (MFN) tariffs, which are the standard rates charged on imports from all WTO members, excluding preferential rates, or lower rates charged within quotas.


These high levels of support are likely to become increasingly untenable over time. External pressure for Norway to decrease its import tariffs on agricultural imports is unlikely to diminish. Domestically, the increasing need for a more productive non-oil economy as petroleum-related activities wane, will likely see heavily subsidised sectors come under greater scrutiny. In short, agricultural policy needs to help prepare producers for change, guiding them towards more sustainable and competitive production.
The government has already lowered disincentives to the formation of larger production units by raising some of the ceilings on support and production per farm, and it aims to reduce the protection for farmers embedded in legal regulations of the agricultural property market. However, there remains much more to be done. Import tariffs and cash subsidies should be put on a downward trajectory, cultural and environmental support need to be better linked to objectives and more steps are needed to liberalise agricultural property market legislation. In addition, the system of annual negotiation between government and farmer representatives requires review; the system is not without merit, as any agreement means buy-in from the farming unions and therefore comparatively few problems in implementation, however the negotiation tends to preserve (and errs towards extending) the subsidy system.

Reforms of regulations and institutional settings would strengthen competition

Various aspects of Norway’s competition legislation could be strengthened to improve enterprises’ incentives to seek and exploit efficiency and productivity improvements. Exemptions from the Competition Act not only apply in agriculture but also to fishing and book retailing. Norway’s competition policy takes a “total welfare” approach to assessing markets, for instance in the case of prospective mergers. This is sound in principle as it aims to maximise overall economic surplus by considering all gains and losses but concerns have been raised that it may be allowing too many deals that risk limiting competition to go ahead (Productivity Commission, 2015; OECD, 2014a). Among the positive policy developments, following concerns about conflict of interest the government has proposed to remove the role of the Ministry of Trade, Industry and Fisheries as the appeal body in competition cases and establish a new independent appeal body. Also, the government has made welcome proposals that would lighten Sunday retailing restrictions. Past OECD reports (OECD, 2014a) have recommended increasing the power of the competition authority and Norway’s Productivity Commission calls for a systematic review of competition.

State ownership of business enterprise in Norway has diminished, but nevertheless remains extensive. Around 285 000 people, or 11% of employees are employed in companies with partial or complete state ownership (IMF, 2014). Economically, the most significant holding is the 67% state stake in the oil and gas conglomerate, Statoil ASA. Other sectors with substantial state stakes include, notably telecoms (Telenor), energy and aluminium production (Norsk Hydro), chemicals (Yara International, ASA), a manufacturing conglomerate (Kongsberg Gruppen) and banking (DNB Bank). The control and regulation implied by state stakes is echoed in OECD sectoral indicators (Figure 13). The frameworks for administering state-ownership are in many respects exemplary. For instance, the state ownership operates on a set of governance guidelines that are in line with generally accepted good practice. However, this does not necessarily justify retaining stakes and it is encouraging that the current government intends further partial or complete sell-offs in a number of companies (see annex).

Competitive market models are operating reasonably well in telecoms and electricity, the latter in large part thanks to participation in an integrated open market with other Nordic countries (Figure 13). As in many countries, rail and postal services have only been partially liberalised. Encouragingly, however, the government plans on bringing change to both sectors (see annex). Figure 13 points to a mixed picture outside the network industries. It underscores that some aspects of retail are indeed quite restrictive but
meanwhile professions appear comparatively liberalised. Policy may be helped by the strengthening of assessment methodology, for instance through adopting approaches described in the OECD’s Competition Assessment Toolkit.

Boosting output and inclusiveness by improving skills and encouraging labour supply

Workforce skills, education and incentives encouraging labour-force participation are key to good framework conditions for business and productivity but also important for household well-being. In some segments of the Norwegian labour market flows of workers from other EEA countries (notably Poland) have filled gaps created by strong demand. Indeed, these have almost certainly helped the economy sustain a higher level of activity. However, inflows and outflows of workers cannot resolve all imbalances and improving the skills among the domestic population needs to be a priority. In this regard, institutional frameworks and policy settings on these dimensions are sound for the main part, and Norway is undertaking an innovative “skills strategy” initiative (Box 1).

Education reform towards greater quality and efficiency

As underscored in previous Surveys, student skills in primary and secondary education are not outstanding, but spending is comparatively high. Norway’s overall PISA score is middle ranking among OECD countries while spending per student (on a purchasing-power parity basis) in primary and secondary schools ranks third highest (OECD, 2014b) (Figure 14). Furthermore, completion rates are weak in many vocational upper-secondary education courses; which is partly a positive sign of job-opportunity, but also reflects problems in the vocational-course system (OECD 2014a). The latest campaign to improve primary and secondary education centres on a programme (Promotion of the status and quality of teachers – joint effort for a modern school of knowledge), whose goals include increased

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1. Scores potentially range from zero to 6 and increase with restrictiveness.
2. OECD mean is depicted on a line connecting the minimum and maximum values within OECD.
3. Gas sectors in Norway include upstream activities, which may face different regulatory issues from those mainly involving downstream activities.

Box 1. **Norway's National Skills Strategy project**

Recognising that the country will need to maximise its human capital and skills if it is to move beyond a longstanding reliance on natural resources and ensure inclusive growth in the future, Norway was the first OECD member country to undertake a national skills strategy project in 2013-14. Using the OECD Skills Strategy framework, the diagnostic phase identified a set of 12 skills challenges spanning the entire skills system of developing, activating and using skills. The report found that Norway would develop more relevant skills by: ensuring strong foundation skills for all, reducing drop-outs, and informing educational choices. That activating the supply of skills would be boosted by: enhancing labour market participation among those receiving disability benefits, encouraging labour market attachment among low skilled youth; and ensuring Norwegians remain active longer. More effective use of skills could be achieved by: engaging employers in ensuring a highly skilled workforce; promoting entrepreneurship and enhancing the use of migrant worker skills. Finally, the effectiveness of Norway’s overall “skills system” would be strengthened by facilitating a whole-of-government approach to skills; ensuring local flexibility and adaptability for nationally designed policies; and building partnerships at the local and national level to improve implementation (OECD, 2014b).

The Skills Strategy project was characterised by close collaboration with an inter-ministerial project team (including representatives from education, labour, trade and industry, local government and modernisation, and finance) as well as by extensive stakeholder engagement through a series of interactive workshops in Oslo, Drammen and Mo I Rana. Building on the diagnostic phase and input from a range of stakeholders (including employers, trade unions, education providers and students), the project then went on to identify 5 main actions for Norway to pursue: set up a “Skills Strategy for Norway” incorporating a whole-of-government approach; establish an action plan for continuous education and training; strengthen the link between skills development and economic growth; build a comprehensive career guidance system; and strengthen incentives for people to move into shortage occupations (OECD, 2015). Full implementation of these actions would contribute to addressing Norway’s need to raise productivity, innovation and competitiveness while fostering social inclusion.

support for teachers to continue education and the introduction of 5-year master's-level degree for new entrants to the profession. The outcomes of these measures should be monitored and adjusted as required. Also, despite some progress, transparency on performance could be greater; results could be made more readily available.

Chapter 1 of this Survey finds that Norway’s tertiary education system has encouraged participation and generated high attainment rates. Research activity also increased substantially in recent years (Figure 15, Panel E). However, some indicators point to quality issues and room to improve outcomes. Recent results from a national student survey of higher education (Studiebarometeret) reveal relatively low levels of satisfaction in some critical areas of learning outcomes, such as experience with research and development work and innovative thinking (Figure 15, Panel A). Moreover, the Survey of Adult Skills (a product of the OECD Programme for the International Assessment of Adult Competencies, PIAAC) shows that around 10% of 20-34 year-old tertiary graduates in Norway attain only low levels of literacy (level 2 or below) (Figure 15, Panel B). While this finding may also reflect, among other things, shortfalls at earlier stages of education, and Norway fares
better in the PIAAC Survey than the OECD average (Figure 15, Panel B), it is still worrying. Norway also has fewer universities than its Nordic neighbours in a ranking of top universities on the basis of research-related and other indicators (Figure 15, Panels C and D). The European Commission’s index of research excellence and some other research quality indicators also show scope for catch up with other Nordic countries (Figure 15, Panel F).

The tertiary education system is also relatively costly in terms of spending per student and as a share in GDP (Figure 16, Panels A and B). The predominantly public system charges students no tuition fees and provides loans to cover living expenses that can be partially converted to a grant. This support for students reflects Nordic social preferences for inclusiveness and equity, and financial independence of young adults. It is also a significant contributory factor to the high levels of participation in tertiary education.

While respecting social preferences, efficiency and quality need to be safeguarded. Substantial financial assistance to students, in particular, has not encouraged timely completions despite the conversion of loans to grants being conditional on progress in
Figure 15. **Tertiary education indicators**

A. **Learning outcome according to national student survey results**

- Experience of R&D
- Knowledge of scientific research
- Vocational skills
- Innovative thinking
- Oral comm. skills

Overall average

1. Average scores of respondents who rated education quality from 1 (worst) to 5 (best) for each question. The "overall average" refers to average of scores of all 10 questions in the student survey related to learning outcomes. 2014 data.

B. **Share of young tertiary graduates with low literacy skill**

1. Share of tertiary graduates aged 20-34 who scored literacy level 2 or below (with level 5 being most proficient) in PIAAC 2012. More details about proficiency levels are available in “The Survey of Adult Skills Reader’s Companion” (OECD 2014).

C. **Number of top-ranked universities**

1. Number of universities in each country that are ranked in the world top 800 (THE) and 500 (ARWU). The ranking of each country is depicted on a line connecting the highest and lowest ranked ones among world top 800/500 universities. The overall score is calculated as a weighted average of 13 and 6 relevant indicators for THE and ARWU, respectively. 2015 data.

D. **Number of top-ranked universities**

1. Academic Ranking of World Universities (ARWU)

E. **Trends in research activity in Norway**


StatLink: [http://dx.doi.org/10.1787/88893314822](http://dx.doi.org/10.1787/88893314822)
Although the situation seems to be improving, only around 65% of students are completing their degrees within 5 years (SSB, 2015b). Also, the partially performance-based funding system for higher-education providers has not delivered the expected efficiency and quality gains, and meanwhile it has overly incentivised institutions to focus on producing study credit points (required for the completion of courses) rather than degree completions. Moreover, despite improvements in recent years, enrolments in fields important for innovation, such as science and engineering, remain relatively low internationally. Also, supply shortages are expected in some areas, such as teaching and nursing, according to long term skills projections by Statistics Norway (SSB, 2013, 2014). Adding to challenges, many small institutions, though providing regional-level provision, do not reach a critical mass of staff and students for high quality tertiary education and research outcomes (Government of Norway, 2015).

To overcome the challenges faced by small institutions a major reorganisation of the higher education sector is in the pipeline. This aims to create stronger academic environments and increase efficiency through a process of institutional mergers. The first wave of mergers implemented in January 2016, reduced the total number of higher education institutions from 53 to 42. It is important to ensure that all the conditions for successful mergers are present, including careful selection of merging partners, adequate and sufficiently flexible financial support during the merging process, and an effective management and leadership. Close monitoring of the outcomes of the merging process is essential given mixed cross-country experiences (Skodvin 1999, 2014).

A government-commissioned expert group has recommended some new features and adjustments to the funding system for higher education, while maintaining its basic structure (Expert Group, 2015). Proposed changes include the alteration of the
performance-based component of funding to strengthen incentives in key areas, in particular study completion. Additional performance indicators, including one reflecting the number of graduates, were proposed to this end. Linking funding to graduation rates will, in principle, reinforce current incentives for completion in the system but the impact would need to be monitored and evaluated. The funding system could also be used towards other aspects of higher-education policy. Funding mechanisms could, for example, provide differentiated rewards to institutions for successful study outcomes for particular groups of students, such as immigrants, and specific courses such as certain subjects within the STEM disciplines, or nursing and teaching qualifications. Building in graduate labour market outcomes to providers’ funding formulae could also be considered. In addition, as suggested by the expert group, a system linking a small portion of funding to a multi-annual performance agreement (“contracts”) between the government and each higher education institution, could be considered. If properly designed, such agreements could provide an avenue for greater differentiation between institutions (Expert Group, 2015).

There is room for adjusting the student loan-grant system to encourage more timely completions. The government is currently considering the recommendations from the Productivity Commission and the expert group regarding an additional incentive for completion of all degrees. Given the evidence, further experimentation with incentives in student-loan support aiming to improve study completion certainly seems worthwhile. Student support could also be better linked to study requirements with a differentiation of the length of support according to the standard duration of courses. The achievement of other policy goals might also be helped by further tweaks to the loan-grant system, perhaps along the lines already in place that partially write off loans for students attending certain teacher training programs (STEM and foreign languages) and for graduate doctors who work in the northern counties. Discounts on loan repayment or grant conversions could be offered for students taking courses that are seen as having particularly high returns to the general public, such as certain subjects within the STEM disciplines and some professions where demand for graduates is likely to increase rapidly (long-term projections suggest this may be the case for nurses, for example); though selecting which subjects to support needs careful attention. Needless to say, the private return to education also depends strongly on wage prospects. In this context Norway’s narrow wage distribution has some bearing on student choices.

Ensuring good communication and easily accessible data to help prospective students make informed choices is particularly important in Norway. Indeed, informing educational choices is one of the main policy challenges according to the OECD Skills Strategy for Norway (see Box 1 and OECD, 2014b). Improved professional career guidance services would particularly benefit students from disadvantaged backgrounds, who often tend to underestimate the net benefits of tertiary education (OECD, 2009). A committee was appointed in 2015 by the government to investigate how lifelong career guidance can be strengthened.

Successful tertiary outcomes hinge on effective monitoring mechanisms. The government should go ahead with plans to introduce tighter requirements for accreditation and the establishment of advanced research courses, especially given that non-university institutions can apply for university status under current arrangements. Since the early 2000s the number of universities has doubled (from 4 in 2003 to 8 in 2012)
and still more institutions have aspirations for university status (NOKUT, 2013a). Courses in the new universities continue to be dominated by traditional professional programmes, such as teaching and nursing (NOKUT, 2013b). However, if this “academic drift” continues in the future it can have an impact on diversity and quality. It is important to safeguard educational opportunities with a more vocational orientation to meet skills demand. More rapid development of information systems for monitoring learning outcomes and the quality of higher education, notably the development of a portal with readily available quality indicators, is vital.

**High female employment is a key driver of many of Norway’s outstanding socio-economic outcomes**

Much of Norway’s and other Nordic countries’ favourable scores on well-being are attributable to a strong focus in policy, and by society, on employment, and most significantly on the employment of women (Figure 17). High female labour-market participation means comparatively fewer poverty issues, such as those arising from single-parent households, and promotes efficient use of skills and talent. The good availability of subsidised child-care services and working-time flexibility helps combine paid employment and family life. Also, Norway has led steps to actively promote women’s career progression. In particular, it was among the first countries to introduce women-on-boards rules for publicly listed companies (Box 2). This said, changes to parental leave by the current government include a reduction in the leave that is reserved for the mother and father individually (with corresponding increase in the “shared period”), may well result in less use of parental leave by men as less leave is reserved exclusively for them, thereby diminishing women’s labour-market opportunities.

Figure 17. **Norway’s employment rates** are high

Among those aged 15-64

1. Ratio of employment to population (15-64). 2014 data.

StatLink: [http://dx.doi.org/10.1787/888933314841](http://dx.doi.org/10.1787/888933314841)
Box 2. **Corporate board gender quotas in Norway**

Gender quotas were first introduced in some public sector entities in the 1980s and were extended in 2003 under legislation requiring at least 40% of women on boards of public limited companies (known as ASA), inter-municipal and state-owned companies. However, as of 2005, only 17% of board members were female and enforcement of the quotas was tightened by legislating sanctions, including the threat of dissolution of non-compliant companies (Storvik-Teigen, 2010). Subsequently, the 40% target was reached in 2008. The coverage of the quota was extended to co-operative companies in 2008 and to municipal companies in 2009.

Quotas were often resisted by business on grounds that it would be hard to find qualified women and therefore quality of decisions would deteriorate (Storvik-Teigen, 2010). To ease these concerns the government introduced policies to identify qualified women in a database and training programmes for qualified female candidates. Many also considered quotas an unnecessary interference. As a result about a third of the 563 concerned companies delisted upon the introduction of the sanctions. These fears have been proven wrong. On average, female board members in Norway have higher educational qualifications than their male colleagues (Bertrand et al., 2014). Some Norwegian studies (Storvik-Teigen, 2010) have also shown that female presence at boards has led to less layoffs in downturns, but with some trade-offs with profitability. The quotas are now widely supported and considered a success in enhancing diversity and better business decisions. However, the impact on enhancing women’s careers more generally has been limited (Bertrand et al., 2014), although more positive effects may emerge in the coming years. Overall, the Norwegian experience suggests it can take a long time to reach quota and that sanctions are critical.

Figure 18. **Share of women board members in the largest publicly listed companies**

Note: () indicates the number of companies on which the data are based for each country.

1. 2014 data. For EU countries, Iceland, Norway, and Turkey the companies are a selection of those included in the Primary Blue-Chip Index, which is an index that includes large companies headquartered in each country based on market capitalisation and/or market trades. For Australia, Canada, Japan, Switzerland, and the United States the companies are selected from various stock-market listings (S&P/ASX 200, S&P/TSX 60, TOPIX Core 30, SMI index, and S&P 500, respectively). Source: European Commission (2014), Database on women and men in decision-making; Catalyst (2014), Catalyst Census: Women Board Directors 2014.
**Sickness leave and disability benefit remain a route to early retirement for many**

Norway’s sickness leave and disability benefit system has long been a key weak-spot of the welfare system, encouraging substantial de facto early retirement. It is particularly relevant given pressures arising from ageing. Typically, individuals transition from paid sick leave (which lasts up to one year), to a rehabilitation-type benefit (up to four years duration) and then to the disability pension. Around 10% of working-age individuals are receiving the disability benefit (Figure 19), most of them approaching retirement age. Among 60-64 year-olds, one third of women and nearly one quarter of men are on disability benefit. In addition, around 5% of the working age population are on the rehabilitation benefit and about 3.5% are receiving the sick-pay allowance. In recent years there has been a downward trend in disability-benefit recipiency among older cohorts. However there has been a corresponding increase in the number of beneficiaries of the rehabilitation benefit (Figure 19). Also the share of recipients is rising in some younger cohorts.

**Figure 19. A sizeable minority of the population are on disability benefit**

A. As a percentage of working-age population (15-64) - highest 10 OECD countries

B. Percentage of women disability pension beneficiary by age

C. Percentage of men disability pension beneficiary by age

1. Data for 2010 or last available year.

Many positive features have already been built into the system. For instance, there are avenues for gradual re-entry from sickness into work, a fine grid of partial disability benefits and comprehensive rehabilitation, training and work placement services. Also, there is an agreement between the government and unions (the Inclusive Working Life Agreement) to reduce sick leave. However, although it has been renewed many times, it does not appear to have made a huge impact.

All positive efforts to tackling the problems in the sickness and disability system can only be applauded. Past Surveys have, in particular, suggested:

- Lengthening the employer-financed phase of sick leave (currently 16 days) to encourage a more active role by private- and public-sector employers in monitoring, preventative measures and rehabilitation.
- Reducing the generosity of payment, for instance by lowering the replacement rate for long-term sickness.
- Tightening medical assessment procedures, especially through more “third party” medical assessment. Despite past measures and plans by the current administration (it aims to trial a new medical assessment after six months sick leave and implement guidance for doctors regarding sickness certificates), the assessment system may still rely too heavily on assessment by the individual's general practitioner.

**Public-sector pension regulation and temporary work regulation limit labour supply**

Norway's pension system includes early (or deferred) retirement provisions under the so-called Contractual Early Retirement (AFP) system. Biases in favour of early retirement were removed from the private-sector variant of this scheme in 2011. However, the public-sector AFP system continues to mean a reduced incentive for employment beyond 62 years of age, encouraging early retirement. A process that includes the social partners is underway with a report outlining alternative public-sector pension models due by the end of 2015. This initiative could clearly communicate the downsides of maintaining the status quo in public-sector pensions and propose effective and workable avenues for reform.

Norway has to date scored poorly on indicators of the restrictiveness of temporary work-agency employment and on the use of fixed-term contracts (OECD, 2013b). Regulation includes limits on the cumulative number of temporary work assignments. Such provisions aim to prevent the undermining of protection for permanent employees, and, to a degree are part of the consensus-based “package” of pay and conditions in Norway. However, past OECD Surveys (OECD, 2014a, for instance), have underscored that there is nevertheless room for liberalisation. The government has taken some steps including the introduction of a “general permit” for temporary employment open to all employers and occupations. In addition, there has been some lightening of working-time regulation (see annex).

**Tackling environmental issues**

**Norway has good environmental-policy frameworks and strong commitment**

Norway is at the forefront of good practice in many areas of environmental policy. Its National Sustainable Development Strategy provides a comprehensive framework for incorporating environmental issues into policymaking (OECD, 2011). Also, management and co-ordination by the Ministry of Finance and development of sustainability indicators help maintain the profile of environmental sustainability in decision making. Furthermore,
as a member of the European Economic Area, Norway has transposed most EU environmental directives and often imposes more stringent requirements than those require. Also, use of economic policy instruments has been pioneering in many areas, for instance regarding taxes on waste landfilling and incineration, and on sulphur monoxide and nitrogen monoxide. Innovative technical solutions have also been encouraged, for instance in carbon-capture technology.

Norway’s greenhouse-gas emissions (GHG) per capita are middle-ranking in international comparison (Figure 20). Emissions from production of oil and gas, along with chemical processes in the production of aluminium and alloys account for a substantial proportion of emissions. Meanwhile, the abundance of hydroelectric power means electricity is generated with practically zero emissions. Transport accounts for about one quarter of emissions. Net greenhouse-gas absorption by forests and other area corresponds to about half of gross emissions (such net absorptions is not taken into account in the international comparisons in Figure 20).

Figure 20. Norway’s per capita greenhouse gas emissions are middle ranking

Norway has been a member of the European Union’s Emission Trading System since 2008 and it will probably reach its current 2020 target under the Kyoto Protocol, which is consistent with reducing GHG by 30% compared with 1990. It is likely to achieve emission targets, in part, through the purchase of quotas issued under the Clean Development Mechanism (CDM). By and large, such purchases probably reflect an absence of lower-cost opportunities for domestic initiatives. Also, Norway has creditably been an early mover in goal renewal by setting an “Intended Nationally Determined Contribution (INDC)” of a 40% reduction on the 1990 emission level by 2030. Norway intends to fulfil this emissions target in co-operation with the EU, and a dialogue with EU on this issue has started.

Norway has long experience with environmental taxation, indeed the first Norwegian tax with an explicit environmental purpose (a sulphur tax levied on mineral oil) was introduced in 1971. Taxes on mineral fertilisers, pesticides and lubricant oil were introduced in 1988, carbon dioxide (CO₂) tax on petrol, auto diesel oil, mineral oil and the petroleum
sector (only offshore) in 1991. Since then changes in taxes relating to greenhouse gas emissions have been made mainly by broadening the tax bases. Today, more than 80% of Norwegian greenhouse gas emissions are covered by carbon taxes and/or the EU emission trading system. Nevertheless, as elsewhere, greenhouse-gas taxation remains far from uniform and efforts to reduce disparities would help ensure consistent and economic incentives to abate. A commission on green taxation is due to report in December 2015 that is expected to address carbon-price uniformity along with other issues.

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Thematic chapters
Chapter 1

Addressing the challenges in higher education

Norway’s predominately public and tuition-fee free tertiary education system encourages participation and has high attainment rates. However, challenges in spending efficiency, study times, skills demand, inclusiveness and quality remain. Also, learning outcomes could improve further. Moreover, few Norwegian universities rank high in international comparisons on the basis of research-related and other indicators, and spending per student or GDP is relatively high. Many small institutions, aiming to meet regional needs, do not reach critical mass in staff and student numbers. Many students take considerable time to finish their studies despite financial incentives, and students from lower income groups have low tertiary participation and completion rates despite a strong focus on inclusiveness. Enrolments remain low in fields such as science and engineering, although they have increased in recent years, and supply shortages in some professional areas indicate room for improvement. Better incentives for both students and institutions to ensure timely completions, with a special emphasis on disadvantaged students and labour market needs, a structure that paves the way for adequately sized institutions, and effective governance are essential for higher quality education and research. Effective monitoring of the outcomes is also vital. The government’s comprehensive quality-enhancing agenda, with a focus on these fronts, is welcome.
Chapter 2

Policy challenges for agriculture and rural areas

Norwegian policy gives high priority to supporting rural communities, with support for agriculture receiving particular attention. It is broadly successful in terms of maintaining rural communities, and urban-rural gaps in a range of well-being indicators are comparatively narrow. However, the cost-efficiency and sustainability of the policy mechanisms are questionable. Agriculture and rural policy in Norway needs to focus more strongly on economic sustainability alongside social sustainability. Agricultural support remains overly concentrated on maintaining the status quo and has seen little reform compared with policies elsewhere in the OECD. In contrast, the fishing industry has reformed much further towards economic sustainability, aquaculture has seen considerable success and there is potential for more rural tourism. Supporting rural communities also requires attention to the quality of public services in rural areas, and this report draws particular attention to inefficiencies arising from small-scale municipalities, and supports efforts to encourage mergers towards larger units, paving the way for greater operational leeway for municipal government.
This Overview is extracted from the 2016 Economic survey of Norway.

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Further information

• For further information regarding this overview, please contact:
  Piritta Sorsa
e-mail: piritta.sorsa@oecd.org
tel.: +33 1 45 24 82 99

Philip Hemmings
e-mail: philip.hemmings@oecd.org
tel.: +33 1 45 24 76 69

Vassiliki KOUTSOGEORGOPOULOU
e-mail: vassiliki.koutsogeorgopoulou@oecd.org
tel.: +33 1 45 24 80 92

See also: http://www.oecd.org/eco/surveys/economic-survey-norway.htm

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